

REMARKS/ARGUMENTS

- Amendments -

Applicant respectfully requests that the pending claims be amended as indicated in the accompanying amended page(s), in which:

- Claims 1 - 3, 5, and 7 to 8 are amended to better define the invention;
- Claim 6 is cancelled; and
- Claims 9 - 11 are newly added.

By these amendments, claims 1 - 3, 5, and 7 - 11 are pending. Applicant submits that no new matter has been added by these amendments.

- Remarks -

35 USC 112, first paragraph

Claim 8 is amended to recite that the one-chip microcontroller writes program data to a program memory, and runs a program from the program memory. Support for this feature can be found, for example, at page 24, lines 5 - 20, and page 29, lines 1 - 4.

35 USC §103(a)

Independent claim 1 is rejected under §103(a) over XP-002353310 to Petit et al. in view of Shintani et al. (US 5,875,034). Applicant amends claim 1 to better distinguish over this combination.

Amended claim 1 additionally recites, *inter alia*, a linear image sensor for scanning a printed instruction card, and a linear image sensor interface that is integrated on the one-chip microcontroller. Claim 1 further recites an input buffer to which both the area image sensor interface and the linear image sensor interface are connected, the input buffer effecting communication between the VLIW processor and the area and linear image sensor interfaces.

The above features do not appear to be taught or suggested by either of Petit et al. or Shintani et al. Accordingly, Applicant respectfully submits that claim 1, thus amended, is novel and inventive.

Other Amendments

Claims 2, 3 and 5 are amended to improve readability.

Claim 6 is cancelled.

Claim 7 is amended to be consistent with the amendments made to claim 1.

Claim 8 is amended to recite that the one-chip microcontroller includes a program memory, to which the program data is written, and from which the program as represented by the printed instruction card is run.

New claims 9 - 11 are added. Claim 9 recites that the one-chip microcontroller further includes an output buffer which effect communication between the VLIW processor and the printhead interface. Claim 10 recites that the VLIW processor receives pixel data from the image sensor, converts the pixel data into an internal format, and writes the converted pixel data to the DRAM memory interface. Claim 11 recites that the VLIW processor converts the pixel data to print image data, and writes the print image data to the output buffer.

The Examiner's further consideration of the claims is earnestly sought. Applicant thanks the Examiner in advance for his further consideration, and looks forward to word of official communication in due course.

Very respectfully,

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